The CHEMIST

Bulletin of

THE AMERICAN INSTITUTE OF CHEMISTS, INC.
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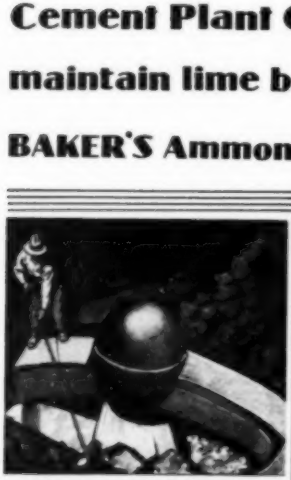

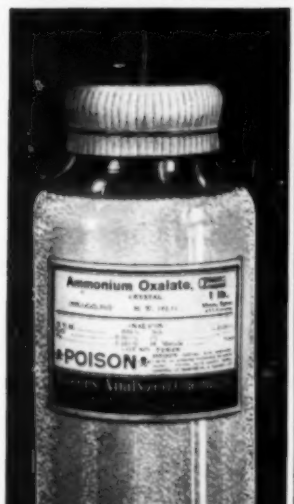

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THE EMPLOYER LOOKS AT CHEMISTS

When Dr. Walter S. Landis, Vice-President of the American Cyanamid Corporation, addressed the meeting of the New York Chapter on March 7th, he faced the largest group of the season. Why?

Someone waggishly suggested that chemists are so accustomed to think of themselves as down-trodden and abused that they might be expected to glory in the exquisite pain of feeling themselves dissected by a Typical Employer Who Does Not Understand. Someone else suggested that the crowd came because a *chemist* was to speak, and because a chemist who has become an executive in a large industrial corporation might well be expected to have something worth while to say to, and about, those who practise chemistry professionally.

Before introducing the speaker, Dr. Crossley summarized the objectives of the Institute, formulated the Institute's idea of what a chemist is, and stated that the Institute is striving to separate the chemist as a professional person from the overshadowing influence of chemistry as a science. Whereupon, Dr. Landis started off by saying that he considers it extremely difficult to differentiate between the science and the practitioner, and that if one takes the chemist out of the science there is little left.

He believes that while it is true that there is no human activity in which chemistry does not play an active part, it is equally true that chemists are paradoxically aloof from human contacts. He has observed that bankers, engineers, and others can rouse interest in outsiders when they talk of their work, but that as soon as a chemist begins to talk of *his* work, his listeners are likely to throw up their hands and wail, "Don't talk chemistry to me!" And he wonders why.

In his opinion, the chemists themselves are to blame.

Perhaps this is because of the chemist's heritage from his medieval ancestor, the alchemist, who shrouded all his words in mystery, and wrote voluminously in cryptic symbols. The symbols are all very well; they serve their purpose, but chemists in general should tear aside the veils of mystery, simplify their language, and prove that they really do share an interest in the ordinary things of life. Also, they should mingle more and exchange ideas with people in other lines of work.

Dr. Landis stated further that about ninety per cent of chemistry is destructive of capital, and that chemists badly need to learn a sense of proportion. Every time a chemist works out and proposes a change in an industrial process, he implies the scrapping of a certain amount of capital. In the refining of a process, the operating company must either find more capital to put into the refining, or scrap everything at hand and start all over again.

He concedes, of course, that there is usually something which ought to be thrown out—that the very throwing out is often half of the improvement—but that changes should not be recommended or adopted if they involve too much ruthless destruction of capital. The average saving has been estimated at two to five per cent. A saving of ten per cent is exceptional, but whether the amount be much or little, the saved energy should be directed to finding further uses for what there is on hand. By constant work in this direction a better balance will be obtained, and that figure for percentage of destruction should, in fairness to everyone, be lowered to about fifty per cent.

This work on finding uses for materials on hand constitutes *research* in its broader sense. Dr. Landis believes that there is room for much intelligent educational work on the matter of research. Financial investors, for instance, are inclined to over-estimate the value of research. Many capitalists feel that an enterprise in chemical industry is more or less of a risk unless the company maintains a research laboratory. To conform to this state of mind, therefore, most companies are willing to set aside a room called the "research laboratory," outfit a work table with some nice-looking glassware and other apparatus, prop a chemist up against it, and claim to satisfy the urge of the investors. As to what these same investors do to check up on the progress made in said laboratory, echo answers nothing.

Dr. Landis believes that success in research is purely a matter of personnel, and that very little thought has been given to it. He feels that technically trained students are not properly taught in research methods, and that the net results obtained from undergraduate work on original theses do not warrant the amount of time involved.

In preparing for an engineering degree, the student is obliged to work out some practical problem; it is none the less to his credit that that very problem has been worked out year after year by preceding classes of students, if it still has practical value. On the other hand, a student of chemistry is too frequently set to work on some odd chemical of little, if any, known value. When such a problem is taken up for graduate work, the student frequently spends years which might be of greater value if they were devoted to general routine.

In the matter of educational requirements and training for chemists, Dr. Landis believes that four good years ought to be enough, and he is distinctly not in favor of prolonging the period of training. Since no one chemist can possibly do every kind of chemical work, the colleges should start to train specialists as early as possible. Citing the example of study courses in engineering, he mentioned that for two years all courses are parallel; then they split into the different branches. Graduates are

entering practical work later and later, and this seems to be undesirable. At best the college atmosphere is so entirely different from what the student will meet in his later career, that it would be better to readjust his preparation and allow him to get into practical work as soon as possible.

Mr. A. V. H. Mory, of the Bakelite Corporation, the second speaker, agreed with Dr. Landis on the idea of the four-year training for chemists. He thinks it is unfortunate that men trained in chemistry seem to be obliged to stick so closely to their own line of work, when all kinds of business are clamoring for men with executive ability who have been trained in the scientific viewpoint. Such men are needed in the banking business, and in many other possibly unsuspected places—Congress could do with a few, for instance; and in support of this opinion Mr. Mory recounted the story of a full-fledged chemist who started as a general laboratory assistant, but is now general manager of the largest mail-order business in the world.

Such a career deserves to be—if it has not already been—written up in *Success*, or *The American Magazine*—one of those periodicals which feature breath-taking accounts of frequently seemingly incredible accomplishments in the careers of outstanding men and women. The high spot in this story seems to come at the time when the man in question was selected to be the "technically trained textile man" who was so badly needed; the news item being that he knew nothing about textiles. Mr. Mory, however, considered this a comparatively simple matter, because in a person who has nine-tenths of the qualifications for a given position, the learning of the last point should present no difficulty. "In industrial work, fully nine-tenths of a chemist's general work and experience should be outside of chemistry." And in this case the gamble was successful.

Mr. W. M. Vermilye, President of the National Aniline and Dye Corporation, the third speaker, agreed with the substance of what had been said. In his opinion, education in general should teach the knowledge of comparative values, and a sense of proportion. These are so essential in all activities and in every kind of business, that the education which does not teach comparative values, is itself of little value.

In summing up the talks, before throwing the meeting open to the discussion, Dr. Crossley presented three ideas: (1) that the employer of chemists wants them to be more than just chemists; (2) that chemists must be trained to look beyond the test-tube; (3) that the true purpose of chemical education should be to train the chemist to think.

F. E. W.

PROPOSED CHANGES IN THE CONSTITUTION

In accordance with the *Constitution of the American Institute of Chemists*, **Article VII,** *Section* 1, proposed amendments to the constitution must be submitted to the secretary at least sixty days before the date of the annual meeting at which action is to be taken.

Also, a copy of every proposition to amend must be sent to the Fellowship at least thirty days before the date of the meeting.

At the meeting of the Council on March 21st, the submission of the following constitutional amendments was authorized:

Change **Article II,** *Section* 4, to read:

Juniors shall comprise those who have attained the senior year of educational qualifications required for Associates.

Change **Article II,** *Section* 5, to read:

Applications for membership in the various grades shall be made in writing on the form approved by the Council. These applications shall be submitted to the Council. Approval by the Council, after due investigation shall have been made, shall constitute election of the applicant and his name shall be placed upon the roll by the secretary.

In **Article III,** *Section* 1:

Omit "The following officers of the Institute" and add the words "of the Institute" after "secretary" in line 4.

Change **Article V,** *Section* 1, to read:

The following regular standing committees shall be elected by the Council:

Professional Education, Ethics, Nominations, and Qualifications. Other committees may be established by the Council or may be authorized by the Institute.

Omit *Section* 4 and renumber *Section* 5 of Article V.

Omit *Section* 6.

Change **Article VII** to read:

Article VII

Amendments.

Sec. 1. The Secretary shall submit to the Fellowship any proposition to amend the constitution of the Institute which shall be proposed by ten or more Fellows of the Institute in good standing or by the Council.

Sec. 2. All such propositions to amend must be given in writing to the secretary of the Institute at least sixty days before the annual meeting at which the proposition is to be submitted for action.

Sec. 3. A copy of every proposition to amend shall be embodied in the call for the annual meeting, at which the proposition to amend is to be submitted for action and a copy sent to every Fellow of the Institute at least thirty days before the annual meeting at which the proposition to amend is to be submitted for action.

Sec. 4. Propositions to amend duly made in the above manner shall be laid before the annual meeting for discussion and vote. If the proposition to amend is approved by a two-thirds vote of the voting membership present at the annual meeting, such proposition to amend shall be submitted to a mail vote of the entire voting membership of the Institute for ratification.

Sec. 5. The ballots for the ratification of propositions to amend approved by the annual meeting shall be valid and counted only if received by the secretary within thirty days from the date of mailing ballot forms from the office of the Institute.

Change **Article VIII** to read:

Article VIII

By-Laws.

Section 1. The Council is empowered to make such by-laws as may be necessary for the proper government of the affairs of the Institute, provided they do not conflict with the constitution.

Article VIII states that by-laws may be made by the Council; the following modifications of the By-Laws were unanimously approved by the Council on March 21st.

In **Article I** of the *By-Laws* change:

In the last sentence, "shall be" to "are."

In **Article IV** of the *By-Laws*, *Section* 1, change:

"and" (fifth word from end) to "or."

Change **Article IV,** *Section* 3 of the *By-Laws* to read:

The Award shall be made by a majority vote of the Jury of Medal Award. The award shall be made from noteworthy and outstanding service to the Science of Chemistry or the Profession of Chemist in America.

In **Article IV**

Omit *Section* 6.

Renumber *Section* 7 to be *Section* 6.

Omit **Article VII**

Renumber **Articles VIII, IX,** and **X** to be **VII, VIII,** and **IX,** respectively.

In new **Article IX,** *Section* 1, after "For Juniors—$1.00,"

Insert the following paragraph:

"For Fellows and Associates elected in the second half of the fiscal year the dues payable for the remainder of the fiscal year shall be half of the amounts set out above."

In *Section* 1, Lines 2, 3, and 4, cancel "For."

Retitle new **Article IX,** *Section* 5,

So that it will be **Article X,** *Section* 1, to be headed:

Use of Title of Fellow and Associate.

Add new **Article XIII**

The CHEMIST

The official publication of the Institute shall be called *The* CHEMIST. The Editor shall be appointed by the Council.

The CHEMIST shall be issued each month during the season; *i. e.*, from October to June, inclusive.

The subscription fee to *The* CHEMIST shall be allocated from the annual dues, at the rate of Two Dollars ($2.00) a year from Fellows and associates.

Respectfully submitted,

FREDERICK E. BREITHUT
HOWARD S. NEIMAN
ALBERT P. SACHS

***The* CHEMIST HAS PLENTY OF ROOM FOR ADVERTISEMENTS. IF YOU KNOW OF PROSPECTS WHOSE ADVERTISEMENTS YOU WOULD LIKE TO SEE IN THESE PAGES, PLEASE EITHER SOLICIT THEM DIRECTLY FOR US AND REFER THEM TO US FOR RATES, OR SEND US THE NAMES, AND WE SHALL WRITE TO THEM.**

THE ECONOMIC STATUS OF PROFESSIONAL CHEMISTS

By Frederick J. Kenney[1]

Why have chambers of commerce, trade associations, technical, scientific, and professional societies been organized? Why do scientists, industrialists, members of various professions, business men, and artisans attend congresses, annual meetings, and conventions? The answer is the realization that co-operation is vital to progress and success for both individuals and for organizations.

In these modern days of strenuous, keen, and active competition, the business executive is called upon to build an efficient system that will enable his organization to function, expand, and progress in a successful manner. It is immaterial what the industry may be, or whether it is engaged in processes involving scientific manufacturing problems, or just a straight fabrication or marketing transaction, there are certain fundamentals that he must fully appreciate, if the acid test of permanency of the business is to be maintained. Briefly these fundamentals are:

1. THE MARKET
   - *a* Field
   - *b* Stability
2. COSTS
   - *a* Production
   - *b* Selling

They must be closely correlated to maintain success and each requires careful analysis and study for determination of proper balance. These principles which are admitted to be true as to industry (immaterial as to character) also apply to the individual. The individual growing into maturity, preparing to wage the battle of life with victory as the reward, generally follows the particular field (professional or otherwise) that holds for him the greatest attraction and interest, with the purpose of carrying out the work selected to a successful conclusion. It is true that the term *successful* is variable among individuals, but, generally speaking, it has to do with one's economic attainment.

Now, while it is true that chemistry as an *industry* has successfully applied these basic principles, let us consider what chemistry has accomplished as a *profession* along the same lines. I have not been able to find any analysis or study which has ever been made to discover the status of chemistry as a profession. This is to be regretted because of the fact that today chemistry should hold a very important position in the pro-

[1] Mr. Kenney is Chief Chemist of the Testing Laboratory maintained by the Department of Purchase of the City of New York.

fessional field. Up to the present time there seems to have been no attempt on the part of the chemist to examine by any definite business survey method the position of his own profession. Who knows definitely what is the market for chemists? Is there any over-production? Is there any plan that will enable a young chemist to be adequately and equitably placed? Is the cost of the production of a properly trained chemist proportionate to his economic value as a chemist after production? It is assumed that the term *chemist* is to be applied only to men and women of proper educational training and experience.

These are all vital questions to the profession of chemistry although many chemists apparently are so absorbed in the academic phase of the subject that they fail to recognize the value even to themselves of a proper consideration of these important matters.

I believe it is somewhat of a sad commentary on the profession of chemistry to find that many of the directing executives of our large chemical industrial organizations are lacking in technical training and knowledge of chemistry. The probable explanation of this situation lies in the self-satisfied attitude of many chemists who feel that when they have mastered the academic phase of the science they can sit back perfectly content with accomplishment. What they fail to recognize is that there is a practical business phase to chemical work that should be perfectly understood before any chemist can be considered properly fitted to take part in the present-day economic life. And let it be said in passing that no man is doing justice to himself, his family, his profession, or his community who fails to appreciate the value of study along economic lines.

The question therefore arises as to what the chemist can do to aid his profession in the preparation of an authenic balance sheet. It is true that the chemists of the United States (approximately 25,000) are scattered over a very large area and must be approached individually because of their lack of professional organization, but the task of accumulating data for the preparation of a balance sheet will not be very difficult if each chemist will co-operate.

The American Institute of Chemists, recognizing the dire need of an inventory for the benefit of the profession of chemistry, have appointed a committee to undertake an economic survey of the chemists in this country, and they appeal to all chemists, individually and collectively, to give this matter serious consideration.

Remember that the present-day trend toward big mergers and mass production requires an equal concentration of energy in all problems of economic interest. The man who feels that he can plod along as an individual independent of his profession or of his fellow man will some day

(*Continued on page 20*)

THE CHEMIST'S RELATIONS WITH SOCIETY

Excerpts from a talk given by Mr. Franklin D. Jones, before the Philadelphia Chapter on March 4th.

This is a discussion, not of the chemist's economic place in the fabric of society, but of how he compares with other persons, the impression he makes upon those he meets, and how he gets along with his fellow men. It is based upon my interpretation of two years' experiences with a group of personnel consultants. I had the opportunity to see the personnel reports and psychological intelligence tests on over two hundred technical men, most of them men of over five years' experience and active in their profession.

The average chemist seemed to be less attentive to personal appearance and dress than most persons of similar culture and economic station in life. He was not necessarily poorly dressed or slovenly, but distinctly below the average. Apparently most of us forget the extent to which many people are influenced by appearances.

Mentally, the technical man is at the head of the occupational list. On most of the intelligence tests the record scores have been made by engineers and chemists. This is not so much of a marvel, however, when one considers the hurdle of the four-year college course required for a technical degree. High scores on psychologists' formboards and intelligence tests are not the whole story and do not indicate the degree or certainty of success in the individual, but they do indicate the mental caliber or potentiality. Intelligence may be looked upon as a tool or instrument. You know some persons have good tools and do not use them, while others can work wonders with poor equipment. It is the same with men and their mental faculties. Intelligence tests are of value in estimating the possible success of a person in new work.

Some of the valuable features uncovered by tests are the ability to concentrate, the problem-solving ability or *judgment*, the ability to distribute attention over a number of things simultaneously, and learning ability. Concentration is something a laboratory worker must have; judgment is required for almost any kind of success; and an executive cannot direct the efforts of others unless he can distribute his attention to good effect. Learning ability or the ability to profit by experience is probably the most important point in a psychologist's report, for obviously a man who repeats too many mistakes will never get very far. The work of the psychologist is worth while in helping to determine in advance an employee's fitness for promotion, employment, or transfer.

In this connection it is interesting to note how many chemists underrate themselves—not so much in their profession but with respect to persons in other walks of life. In speaking of themselves and their works

they are so prone to stick to the facts, that frequently they make the facts lie by an implied derogation. The last person in the world to bluff is a chemist, and at the same time he is usually an easy prey to a bluff. Apparently he works so much with facts that he is inclined to accept all assertions of others as facts. The personnel heads of two of our largest industrial corporations complained recently that the hardest thing to teach the technical graduate when he starts to work, is the habit of not accepting conditions or statements at their face value.

It is entirely possible that the reason the chemist is not situated to better advantage in our economic scheme is because he is not sufficiently impressive—impressive in the sense that he is a poor salesman of himself and his works. What does that mean? Actually it means his inability to translate his story into the terms of the buyer, and his failure to use the layman's yardstick instead of his own. Most successful salesmen are adepts in the use of similes based on things familiar to the buyer.

When a technical man applies for a job, he usually waits for the employer or interviewer to dig out everything about him and his history, whereas he should present a complete, prepared history of himself and a sales talk covering what he can do and what he wants to do. The employer may disagree with the ideas advanced, but few employers are displeased to meet men with the ability to think. And for the man who is climbing up the ladder, but well on the way, it is well to note the methods of the politician and the advertiser in dealing with human beings; the one uses favors for his fulcrum and the other uses the appeal to one's pride—"keeping up with the Joneses," in other words.

The most frequent barrier to the attainment of higher executive positions is the weakness of the chemist on generalization. Not only the chemists but also other technical men have a tendency to allow themselves to become swamped with detail work. They find themselves unable to lose sight of the various details in the larger perspective of the whole problem. Hence we frequently find a lawyer called in to head a large organization doing work of which he knows nothing. The technical men in that organization are ignored because they have not shown the ability to see the parts of the business outside of their own. The lawyer has been called in because those of his occupation are trained to generalize and to grasp problems in their largest aspect.

In closing, I should like to quote from a personnel psychologist, Dr. E. M. Westburgh, the following list of personality traits which may be of some help to us in sizing up people:

> Ask yourself, is this man practical or theoretical? introspective or active? What are his ideals, if any?

(*Continued on page 27*)

ACKNOWLEDGED WITH THANKS

To Whom Honor Is Due

We admire greatly the spirit in which the American Institute of Chemists award their gold medal for distinguished services to chemistry in this country. It is graceful and wholly fitting that this group of chemists should pay tribute to men outside their professional ranks.

The Institute was the first to recognize in this public and tangible manner the unselfish contributions and unremitting labors of Francis P. Garvan for American chemistry. In awarding the 1930 medal to George Eastman it maintains its own high standard of selection and again bestows this gracious recognition where it is richly deserved.

Industrialist, salesman, financier, Mr. Eastman has long been a staunch friend of pure and applied chemistry. Years ago he established one of the first great industrial chemical laboratories in the United States, and the research work which he has fostered has not only made distinguished contributions to chemical knowledge, but it has also long served as a stimulating example of the value of science in business. Perhaps the very epitome of Mr. Eastman's services to chemistry is to be found in the rare chemical department which his organization maintains at a distinct financial loss. Here chemicals, often unobtainable elsewhere, but highly important in research work, are produced in small quantities and sold at reasonable prices. Invaluable as they are, services such as these escape notice and we congratulate and thank the Institute for rewarding them so fittingly. The award to Mr. Eastman does honor to both the donors and the recipient.—*Chemical Markets.*

Machines and Chemists

[A clipping from *The New York Herald-Tribune* which states the reactions of a member of the Socialist Labor Party.]

To the *New York Herald-Tribune:*

Your editorial columns of recent date contained an interesting article on the probable effect of the machine age on chemists. Referring to the fact that chemists are devising machines to make analyses automatically, you state that it is hard to see how human chemists for routine analysis can survive against such competition. Nevertheless, you welcome the development that is taking place, "for if chemists are no longer needed to make routine analyses, those chemists will be available to study new things in the factory and to do the inventive and good judgment tasks."

There are from 15,000 to 20,000 chemists in the United States. Of

these only a small number are engaged in research, consultative and inventive work. The great majority of them perform the routine analytical operations. If only a fraction of these analytical chemists were released for inventive work, their efforts, added to the skill which is already evolving automatic machinery, would obviously result in increased efficiency and, consequently, the displacement of many more workers from industry.

We are told that workers so displaced find employment making the machines that displace them. This would mean that the new machines require for their production not only as many men as the old, but in addition the number of displaced workers. As the value of this additional labor would be tacked on to the price of the machine, the purchaser would do every bit as well to keep his help and use the old, for what he saves on efficiency he spends on machinery.

It would also mean that while other industries were laying off help the machine industry would show an increase in employment. What we really find is that the machine industry is getting along with less help, for the new machines are themselves made by machinery, and that of the improved, labor-saving kind.

Both the manual worker and intellectual proletarian seem to be up against a tough problem. The solution rests entirely with them. By utilizing their collective strength they could not only capture every political office in the country, but also establish an industrial union of the entire working population, which industrial union would itself furnish the organization necessary to run the industries of the country in the interest of those who work in the industries, and to carry on the functions of civilization.

The Socialist Labor party, of which I am a member, urges this solution on the working population as the only one that is workable.

New York, Feb. 1, 1930 A. O.

Notes from Abroad

"The Chemist as a Professional Man" was the subject of an address delivered by Mr. R. Leslie Collett at the annual general meeting of the Irish Free State Section of the Institute of Chemistry, held last week in the Chemical Theatre of Trinity College, Dublin. The lecturer, who is assistant secretary of the Institute, in the course of his address said that a chemist had a dual identity. He was, in the first instance, an expert craftsman, experienced and skilled in the laboratory arts. He was also possessed of a scientifically trained mind, and was prepared to bring this to bear upon all the manifold problems which confronted the community. His work was indispensable to the public health services, and it was not going too far to say that, quite apart from the investigation of new methods,

many of the industries of the country could not be carried on at the present moment without his supervision and assistance. The services of the chemist were becoming increasingly appreciated, and, although there were still many cases where chemists were not sufficiently well paid, he believed that the time was rapidly approaching when the chemist could look forward to as successful a career as that provided by another profession. It was unfortunate that, in the mind of "the man in the street," a confusion still existed as between the pharmacist and the chemist. —*The Oil and Colour Trades Journal* (British).

The Industrial Chemist (British) comments editorially on **The British Association of Chemists,** on the occasion of its latest annual meeting:

This twelve-year-old youngster gathers strength with every birthday. It is indeed, one of the few chemical organisations that is increasing its membership, and a ten per cent increase over last year speaks volumes for the energy with which the Association is carried on by its Committee, the valuable work that is included in its programme, and the forceful publicity that is cleverly handled. This ten per cent increase cannot be due to an unemployment problem for, on the whole, the chemical industry in this country is in a highly satisfactory condition.

One of the most important problems that the Association has tackled is that of the entry of the foreign chemist in this country. It has been frequently consulted by the Ministry of Labor regarding problems of the admission of foreign chemists to this country, and has made itself satisfied that no permit to work had been granted to any chemist unless there was some special reason for so doing, such as the establishment of a new or secret process. Although we ourselves should prefer a world-free exchange of chemical human material, the necessity of such a step in these days is obvious, in order both to strengthen our very own chemical industries and to ensure that the appropriate scale of salary is maintained.

In an excellent speech, Mr. F. Scholefield, the president of the Association, gave his views of the effect of Imperial Chemical Industries Limited on the chemical situation. This company, he said, has set up so far-reaching an organisation that the British Empire was within a short distance of becoming economically independent of the rest of the world with regard to the greater and more important part of chemical production. Furthermore, with virtually unlimited capital at hand chemistry and, generally, the application of science would move forward at a rate impossible with small units, and the number of highly trained chemists would be needed for the greater demand. In all these circumstances the Association of Chemists should go forward with the task of helping in organising the chemical profession.

The Training of the Chemist

Is the curriculum too unwieldy?

At the annual general meeting of the Institute of Chemistry, held at 30 Russell Square on Monday, March 3rd, Professor Arthur Smithells, the President, in moving the adoption of the report of the Council, made some observations on the question of chemical training, urging in particular that the burden now put on the student was excessive, and too apt to result in undigested knowledge of what were regarded as the higher things of chemistry, with accompanying neglect of what was more simple and basic.

He thought the time was overdue for a thorough reconstruction of the question. He thought that the courses had become congested and the pace too rapid. He alluded at some length to the ways of teaching and work which prevailed in Bunsen's laboratory at Heidelberg, as illustrating the kind of conditions under which, he believed, the early training of the chemist might be more satisfactorily conducted.

The report of the Council showed that the roll of the Institute had increased by 156 members and 20 students, that the Institute was in a sound condition financially, and that the Committee of the Council and Local Section had been actively engaged in the interests of the profession of chemistry.—*The Chemical Trade Journal* and *Chemical Engineer*, London, March 7, 1930.

An Open Letter

To the Editor of *The Chemical Age:*

Chemists are amusing people but they might cultivate the sense of proportion a little more than they do. Mr. Rhodes should take them in hand from this point of view and see that they put a little humor into their applications; they would then perhaps stand a better chance with employers. Also they would not need to worry "to bring the fundamental ideas concerning themselves and their place in the community," before the public. They would leave actions to speak for themselves. They would behave more as men, with less conceit of *research*, and tommy-rotics generally. We have no need to discuss the place and function of the chemist in the country, but to be modest enough to do something worthy of notice by our neighbors. In the medical profession etiquette forbids all self advertising. Why should chemists seek to place themselves on a lower level? We have yet to be counted worthy of our hire as writers!

...The one thing for chemists to do is to throw aside all pretense of

(*Continued on page 27*)

SIGNPOSTS IN CHEMICAL INDUSTRY

Excerpt from a recent lecture by Dr. E. F. Armstrong, F.R.S.

"If thou wouldst be famous, and rich in splendid fruits
Leave to bloom the flower of things, and dig among the roots."

In these lines, it seems to me, Meredith has expressed the alpha and omega of the chemist's work. We chemists have progressed hitherto, and we shall continue to progress, because our investigations are essentially akin to digging among the roots. Our work is necessarily unseen by the nation at large, and therefore unappreciated. Consequently, it is only when the world learns of this or that specific achievement in chemical industry, or by chemical science, that the flowers of success are plucked; and then, often the credit of doing so is bestowed on other shoulders than those of the actual worker.

Obviously it is not until our achievements, resulting from long and patient work—first in the laboratory, then on a semi-technical scale, and finally in actual factory practice—lead to the production of material of direct value to the public at large, that monuments can be and are built to honor the labors of the chemist. Such recognition must come long after the event. . . .

During the time that the patient work of the chemist is going on in our laboratories and factories, some of us should be actively seeking a means to ensure much quicker appreciation of his efforts. The real remedy is how, in my opinion, to encourage and to speed up the spread of scientific education among all classes. This, to some extent, involves the use by the chemist of language easily understood by the layman to describe his work.

Although our special nomenclature is necessary as a form of shorthand when we are dealing with one another, and is undoubtedly superior to that existing in the other sciences, signs are not wanting that it has already gone too far. It is almost impossible, for instance, for any middle-aged chemist, not engaged in teaching, to read a book on physical chemistry without some help in translating the jargon used. When we come to deal with a larger public, we stand to lose everything by not making ourselves easily intelligible. *Language was meant to convey our thoughts, not to hide our learning.*

Today, more than ever, we must be alive to the fact that the valuable asset, formerly held by Great Britain—namely, the skill of the artisan at the bench—is going, and gone. It has been replaced by the skill of the scientist and technician, the chemist, the physicist, and the economist. National prosperity depends on the full recognition of this fact by the

(*Continued on page 28*)

NEWS OF THE CHAPTERS

New York

The regular monthly meeting was held in Room A of the Chemists' Club on March 7, 1930. Dr. Crossley presided; there were seventy-five members and guests present.

On motion duly made and seconded, it was unanimously decided to abolish Section XII of the Chapter By-Laws.

The Chairman appointed a committee on nominations for Chapter officers for the next season to report to the April 4th meeting of the Chapter. The Committee consisted of Messrs. J. W. H. Randall, Chairman; J. F. X. Harold, and S. Newmark. No other business was transacted.

The meeting was addressed by Dr. Walter S. Landis, Vice-President of the American Cyanamid Co., on the subject of "The Employer's Point of View Regarding the Education of the Chemist." Mr. A. V. H. Mory, of the Bakelite Corporation, spoke on the same general topic, as did also Mr. Vermilye of the National Aniline Company. The general point of view expressed by the speakers was that the opportunities for chemists are most generally open to men who combine with technical ability a pleasing personality, and particularly ability of an executive type. There was a vigorous discussion, in which a number of the members rose to the defense of the chemist, under the leadership of Dr. Max Grunbaum.

The next meeting of this Chapter will be held in Rumford Hall, The Chemists' Club, on April 4th. The speakers will be Mr. Fred J. Hambley, President of the Canadian Institute of Chemistry, who will tell of the aims and noteworthy achievements of that body. Dr. Hans T. Clarke, F. A. I. C., who is also a Fellow of the Institute of Chemistry of Great Britain, will discuss the work of the latter organization.

KARL M. HERSTEIN,
Secretary

Philadelphia

The Chapter met at the Engineers' Club, Philadelphia, on Tuesday, March 4, 1930, at 8 P.M.

Dr. Arnstein reported on the Council Meeting which he had attended.

Prof. Hiram Lukens was appointed treasurer of the Annual Meeting.

Prof. Bertolet reported on the progress his committee is making with the preparations for the Annual Meeting.

Dr. Lukens and Prof. Bertolet were appointed as a committee to nominate Chapter Officers for the coming season.

Mr. Franklin D. Jones, Chief Chemist for Phillips & Jacobs,

(*Continued on page 24*)

THE NATIONAL COUNCIL

The seventy-first meeting of the Council of the American Institute of Chemists was held at the Chemists' Club, 50 East 41st Street, New York, N. Y., on Friday, March 21, 1930.

President Frederick E. Breithut presided. The following councilors and officers were present: Messrs. Henry Arnstein, W. M. Grosvenor, Allen Rogers, A. P. Sachs, F. W. Zerban, F. W. Zons.

In the absence of Secretary H. S. Neiman, Miss V. F. Kimball was present to take the minutes of the meeting.

The minutes of the previous meeting were approved.

A message from the Treasurer was read, reporting a balance of $1,676.37 with all bills paid to date.

Upon motion made and seconded, $300.00 was directed to be placed at the disposal of the Philadelphia Chapter for the expenses of the Annual Meeting.

The Secretary was instructed to have proper engraved invitations prepared to be sent to the usual selected list.

The following program was determined for the Annual Meeting of the Institute, to be held in Philadelphia at the Bellevue-Stratford Hotel on May 10, 1930:

1 P.M. Luncheon meeting of the National Council and Board of Directors.

3 P.M. Annual members' meeting of the Institute.

7 P.M. Dinner and presentation of medal to Mr. George Eastman.

The speakers will be: Dr. C. E. K. Mees; Mr. F. E. Breithut; Mr. Frank W. Lovejoy, Vice-President of the Eastman Kodak Company; possibly the Governor of Pennsylvania; and the Mayor of Philadelphia.

President Breithut appointed Mr. A. P. Sachs a committee of one to attend to the Institute Medal, and to have it properly engraved.

President Breithut read a letter from Rosenstein Brothers and Hook, 101 W. 37th St., New York City, asking for the names of several chemists who can analyze leather. This letter was referred to Dr. Rogers for reply.

President Breithut read two communications from the editors of *Chemical and Metallurgical Engineering*, which were referred back to him for action.

A letter was read from the Case School of Applied Science, Cleveland Ohio, asking the Institute to be represented at the semicentennial of the school and inauguration of the president.

President Breithut appointed Mr. Aage T. Krause to represent the Institute, and instructed the Secretary to notify Mr. Krause, and the Case School of Applied Science.

A letter was read from the Department of Commerce regarding the listing of trade associations, and the Secretary was instructed to reply.

President Breithut read a report from Miss Florence E. Wall, editor of *The* CHEMIST.

President Breithut read a letter from Jesse E. Day, Associate Professor of Chemistry, Ohio State University, relative to the Institute. This letter was referred to the Secretary for reply.

The Qualifications Committee submitted its report upon the applications received. The names of the new members elected are on page 29.

The President presented a communication signed by Councilors A. P. Sachs, H. S. Neiman, and Frederick E. Breithut, dated March 1st, suggesting proposed amendments to the Constitution to be submitted to the membership committee and the annual meeting on May 10, 1930.

After due consideration and discussion of the foregoing letter, the Council authorized the submission of several constitutional amendments; see page 6.

Dr. Grosvenor reported progress in the work of the Committee on Licensing.

There being no further business presented to the meeting, adjournment was taken.

HOWARD S. NEIMAN,
Secretary

March 21, 1930

The Economic Status of Professional Chemists

(*Continued from page 10*)

be crudely awakened to the fact that no member of the animal or vegetable kingdom can exist *per se*. Who ever heard of an industry or profession that attained success by ignoring other industries or professions? When our country, with its abundant supply of wealth, natural resources, manpower, and territory finds it advantageous and necessary for economic reasons to co-operate with other nations, where does the chemist get the notion that he can operate as an individual?

It is anticipated shortly to prepare a brief questionnaire covering vital fundamental points which are to be answered anonymously. Do not look at this activity through the narrow field of a microscope, display the same broad interest in the *profession* of chemistry that you do in the *science* of chemistry, and bear it in mind that over 15,000 chemists in this country through their membership in chemical societies realize that co-operation is necessary for progress. It is earnestly requested that you receive the questionnaire in the spirit intended and that you return it promptly.

EDITORIAL

The Open Season for Chemists

Everyone is out gunning for the chemists—poor hunted things! Even a casual survey of recent newspapers and magazines discloses editorials, contributed articles, letters, and accounts of speeches devoted to chemists—what is wrong with themselves, with their way of thinking and doing, whither are they drifting? etc., etc. The Chemist seems to have become a Cause.

Which is all very well; the publicity acreage is, of course, priceless. But it is only constructive criticism, and concrete suggestions for the improvement of existing conditions will get anybody anywhere. Whether or not the vast majority of chemists could be made to accept anything of the kind is another point worth considering. "You can carry water to a horse, but you cannot make him drink." In fact, just one well directed toss of his rebellious head may knock the bucket from your hand.

This business of improving the economic status of chemists, and establishing professional recognition for them is a very serious undertaking, and a very far-reaching problem. By this time it is agreed that there are all kinds of chemists: in plants; in laboratories; at teachers' desks; in libraries; in patent offices; and in their own offices, selling their knowledge and advice. How to reconcile all these? How to lure them all into the same confine and make them stand up like brothers?

The fusion of all these types into a professional whole can be accomplished only by awakening the consciousness of all these different kinds of chemists to the sense of their need for professional solidarity. The problem seems to resolve itself into a matter of education. If, when reduced to the common denominator of adequate preparatory education, a man or woman has fulfiled the requirements for the practice of chemistry, that person has the right to the designation *chemist*, regardless of where he or she elects to utilize that knowledge—in law offices, in plants, in literary work, in teaching, or wherever. As it is now, the patent attorneys usually think of themselves first as lawyers; the works chemists prefer to call themselves engineers; the writers often have to explain how they happen to be such arty-scientific mongrels; and the teachers are swallowed up in the vast hordes of all kinds of teachers, with the doubtful distinction of being considered, as *science* teachers, somewhat rarer animals which could be expected to act differently from others.

Everyone likes to make a stab at the chemist for his aloofness from the practical affairs of life. It is a noteworthy coincidence that with-

in a few days of each other, a prominent Englishman and a prominent American addressed chemists on their need for a sense of proportion in economic values, and for simpler language so that they may bring their relative value before the public in terms which the public can understand.

Chemists have been told that this aloofness, and the semi-mystery into which they have (allowed themselves to be) retired is traceable to their spiritual ancestor, the alchemist; which same being the acknowledged arch-faker of all time, we ask you, is this anything to brag about?

As for the indictment that "chemists talk in symbols," do they really? Excepting for a Czechoslovak, or a Welshman, would it be even possible? Chemists have a perfect right to use their commonly understood abbreviations and expressions when talking among themselves, and if, with the laity, they remain silent—or make others wish they would—it again goes back to the matter of education. There are very few, if any, institutions of learning which require their science students to take courses in expositional composition, which is the secret of all successful teaching, writing, and lecturing on scientific subjects.

Anyway, in defense of chemists, be it remarked parenthetically, that their cryptic utterances are mere circumstances to the conversations and dissertations of the medical fraternity who, having relearned a whole lot that they knew before in an entirely new language, delight in confounding the laity by a macaronic jargon of English, Latin, and Greek, using an arbitrary and usually awful pronunciation for the latter two that could well confound even a scholar in the classics. So that is that!

The Institute wants to define the *chemist* and secure him professional recognition. Most of the lack of professional solidarity among chemists is traceable to the former lack of a well-defined status. To prove that a chemist is entitled to an economic status, he, and others, must know his economic value. The Institute has undertaken to determine that factor, and earnestly needs the co-operation of all chemists in furnishing the answers to the questionnaire which will soon be sent out. Do not consider this as "just another questionnaire." Give it your serious consideration, and conscientious answers; and urge other chemists whom you know to co-operate with the Institute in this very important undertaking.

Chemical education is also a most important factor. If, and when, all reputable universities and colleges will agree to offer curricula to conform to definite minimum standards, the chemically educated student may learn to think of himself as a chemist first, regardless of what practical use he makes of his knowledge—and then the future will take care of itself.

As for ways and means of bringing order out of the chaos which now exists among the thousands who have already left the schools, the Institute is striving to do whatever will prove to be the average best for all concerned. The objection has been raised that licensing the chemist will not *ipso facto* make him a better chemist. Granted; but the chances are that a license, if issued by some competent body, will tag a chemist as a recognizable professional entity, will spare him a lot of explaining and will be fairer both to himself and to those whom he serves. So, if licensing is to be the answer, the American Institute of Chemists, as the professional body devoted to advancing the interests of *chemists* as persons, rather than those of *chemistry* as a science, wants to take an active part in furthering such a movement.

To accomplish anything for general good, the Institute needs the hearty support of large, large numbers. So, if this is the open season for chemists, let us all go gunning for them—not to shoot them down with destructive criticism, but to bring them into the Institute. There are doubtless many chemists who would love to have their status improved, but it has probably not occurred to them to do anything about it. Individuals can do little; but an organized body, delegated to present well defined views can usually accomplish its purpose if it has the support of enough individuals.

What logical reason can any chemist give for not being interested in the work of the Institute? If he is well established and feels that he personally has nothing to gain, his financial support, and his co-operation will help to benefit others; if he is teaching and feels out of touch with all such "extra-curricular activities," he needs that very contact with those engaged in other lines of work, to give him a better viewpoint in his teaching of future chemists; and other chemists, engaged as they are in all kinds of industrial and professional work, should be encouraged to unite professionally, to build up a strong organization, to meet and exchange ideas with one another not as scientific workers, but as persons—social human beings.

Even if the Institute were to do nothing but establish a definite code of ethics for chemists, it would be a notable accomplishment. But this is only one of its objectives; and the Institute deserves the co-operation of all chemists if its very worthy aims and objectives are to be achieved.

SHOW YOUR INTEREST IN THE WORK OF THE INSTITUTE! SAY A GOOD WORD FOR IT WHEREVER AND WHENEVER YOU CAN.

EMPLOYMENT NOTES

The Bureau of Employment of the Chemists' Club is co-operating with the American Institute of Chemists, so that some of the better positions listed with the Bureau may be brought to the attention of Institute members. The Bureau welcomes correspondence with anyone interested in the following openings:

1372 Superintendent for a lithopone plant, thoroughly familiar with the manufacture of this product.

1090 Research chemist. Preferably Ph.D. Desire someone familiar with protective coatings for underground and under-water steel structures. Should be a man with a wide knowledge of materials in general. Work in northern New Jersey.

1048 Man thoroughly acquainted with and experienced in lacquer chemistry. Should know the varied requirements of the entire industry and be able to formulate both clear and pigmented lacquers to satisfactorily meet those needs.

256 Younger chemist with lacquer experience. Someone who has had experience in formulating lacquers to test pigments for use in lacquers.

137 Desires to buy formula or materials from a man who has succeeded in developing a good synthetic rubber.

1099 Engineer with experience in natural gas to take charge of natural gas properties for a holding company.

The Bureau also has various positions for recent graduates either bachelor's, master's, or doctor's, within the last two years.

It should of course be understood that Institute members would receive introductions to these employers only under the conditions of the Bureau's regular contract.

News of the Chapters

(*Continued from page 18*)

spoke on "The Chemist's Relations with Society."

After discussing the lecture, the meeting adjourned.

On Tuesday, April 1st, the Chapter will be addressed by Dr. Joseph P. Harmer of The Harmer Laboratories. His topic will be "Business Organization and Management."

BENJAMIN LEVITT,
Secretary

HELP TO DOUBLE THE CIRCULATION OF *The* CHEMIST. PASS THIS COPY ON TO SOME ELIGIBLE CHEMIST WHO IS NOT YET A MEMBER OF THE INSTITUTE.

THE MEMBERS' FORUM

This department has been introduced as a meeting place for frank discussion of Institute activities, published articles, etc. Your co-operation in helping to make it a success will be some evidence that chemists are not quite so inarticulate as is commonly supposed.—EDITOR

TO THE EDITOR OF *The* CHEMIST:

The question of ethics propounded in the February issue of *The* CHEMIST is of particular interest to me because I am constantly in touch with firms or individuals making products the claims for which do not measure up to the actual powers of the ingredients, and it is my work to reconcile these differences with the truth.

These firms fall into two classes:

a those knowingly making false and exaggerated claims,

b those unintentionally or ignorantly making unwarranted claims.

In either case, if the products are of the nature of foods, drugs, insecticides, and a few others, there are government and state agencies which will relentlessly press such firms until their claims are brought into line with the facts and with the law.

Observance of the facts is here due to legal pressure and not to voluntary action. I believe it is asking too much of human nature to throttle the inflow of checks for the sake of stating facts, unless compelled to do so. The largest and the smallest of businesses are run on the basis of getting away with all that the traffic will bear. Anyone not willing to play the game in this way is either an incompetent martyr or has enough money so that he can operate independently under his own rules.

Many firms recognize a difference in the degree of falsity or exaggeration to which they will stoop. A "white lie" that injures no one is nobody's business, so they look at it. Was not recently one of the large tobacco firms induced to abandon untruthful advertising of its movie stars who were represented as approving its brand when they did not actually smoke any brand?

Such advertising offers little injury except to the advertiser's conscience, but even this innocuous propaganda is objectionable to the majority of the public. As children we disliked the cheater; and we still dislike unfair practices wherein a manufacturer takes advantage of us because he knows we can not check up on him.

As I see the question—*What would I do if I worked for a firm of that type?*—it comes down to how much principle and self-respect I have, and how serious such misbranding is likely to be. Every individual, after consideration from all angles, has his own ideas, and no doubt would be reluctant to commit himself unless confronted by an actual case.

I know a stenographer who left a position because her boss's countenance was not easy on the eyes. The subconscious principle of "beauty first" was enough to overcome financial inducements, even at a time when employment was scarce.

Man has always been willing to battle for a principle—I don't mean all men, but that proportion of them who have energy and self-respect. When a person becomes sufficiently disgusted with the actions of his employer his life will be unhappy until he does something to change the situation. That is the driving force which actuates people—mental satisfaction. Once the mental poise is disturbed the employee will either choose to submit to the tactics of the employer, or take action to bring his daily life into consonance with his principles.

I believe I would be in the latter group.

Yours very truly,
L. N. MARKWOOD

Washington, D. C.,
March 11, 1930

TO THE EDITOR OF *The* CHEMIST:

This letter comes from those "great wide-open spaces where men are men," and chemists are beings who work in laboratories. In common parlance the title *chemist* is indiscriminately bestowed upon all so employed, from the high-school youth running moisture tests on feeds, to the Doctor of Veterinary Medicine engaged in the manufacture of insect powders.

Whether his professional training consists of one year of high-school physics or of six years of work in a recognized university, if he works in a laboratory he must be of necessity a *chemist*. In the mind of the populace a chemist is something of a conglomeration of the "pill roller" in the corner drug store, the high-school chemistry teacher, and Dr. Spoofum, Great Magician, who could change water into wine and do other equally wondrous things right before your eyes. He is supposed to spend his days in a spotless laboratory, surrounded by intricate apparatus, performing fascinating experiments, the successful culmination of which will result in lasting benefit to mankind. He is surrounded by an aura of mysticism and a halo of devotion to "Science for Science's Sake."

So much for the chemist—as he is not. The accomplishment of the objectives of the Institute will find the public with a clearer understanding of the chemist—as he should be.

Sincerely yours,
GEORGE R. GRAY

950 East Richmond Street, Fort Worth, Texas,
March 11, 1930

Calm Hoke once said at a meeting that a balance might be obtained between the supply and demand for chemical jobs if something could remove the false glamor from chemistry, and show its hardships in their proper magnitude—or words to that effect. She might have had a prophetic vision of this paragraph, found in *The Percolator:*

Optimistic Chemistry

From an advertisement of the Home Study Division of the Chemical Institute of New York. "The profession offers congenial employment at good salaries to hundreds of thousands who merely follow out its present applications. The work of the chemist can hardly be called work at all. The days in a chemical laboratory are filled with thrilling and delightful experimentation, with the alluring prospect of a discovery that may spell Fortune always at hand to spur your enthusiasm."

ALL COMMUNICATIONS INTENDED FOR PUBLICATION SHOULD BE SENT DIRECTLY TO THE EDITOR, FLORENCE E. WALL, 345 EAST 68TH STREET, NEW YORK CITY.

An Open Letter

(*Continued from page 16*)

research and devote themselves to plain, straightforward, truthful study and reasoned inquiry. Chemists have to show that they may be trusted to act and think for themselves, and so render efficient service in private practice, rather than let on in public.

What is research anyway? *Search* is a good old English word which everyone knows and can understand. Put *re* in front of it and the public interest is lost. It not only ceases to have any clear meaning, but it becomes a mystery and its devotees a class apart. Let there be more searchings of the heart, and less talk of our status!

The Chemist's Relations with Society

(*Continued from page 12*)

What is the intensity of his desires?

Evaluate to yourself the degree of his enthusiasm, persistence, initiative, aggressiveness, egotism, tact, optimism, and desire for responsibility?

The answers to these should help you to a better understanding of the man to whom you apply them, and knowledge is power just as much in human contacts as it is in the realm of test-tubes and tanks.

FRANKLIN D. JONES

THAT ERROR IN THE MARCH ISSUE!

[Since we are sure that you read *The* CHEMIST, there is little hope of your having missed that slip—in fact, the same slip *twice*—in the last paragraphs of the article about Henry Arnstein. When we traced it back it was too, too obvious that we had committed the crime ourselves, with our own little typewriter. It ought to be very sad, but since no one could possibly be misled by it, it seems to be rather funny.

Therefore and herewith, we apologize most adjectly to Dr. Arnstein. The most plausible extenuating circumstances which we can plead are that membership in the Institute seems to have effected at least one complete conversion. For it has long been conceded that "to err is human."

If, by any mere chance, you do not know what we mean, we suggest that you read every word of the March issue and find out.—*Editor*]

Signposts in Chemical Industry

(*Continued from page 17*)

elector and by the politician, so that the policy of the country, both political and fiscal, may be shaped accordingly. As yet, they, and all but a very few industrialists, have entirely failed to grasp the significance of the changes. It is our duty as chemists to neglect no opportunity to emphasize its importance, and to fit ourselves in every way to carry the burdens which will fall on us.

In general, the chemist is not working over the whole countryside of new knowledge, but along certain definite roads or paths bearing signposts. There are some critics of an older school who hold that we are too gregarious and imitative, and that we lack originality and sacrifice individuality in so doing. We have every sympathy for these, be they few or many of our calling, who would maintain their freedom thus. In our allegory we can say, "Let them wander the hills, eschewing paths, ignoring the guideposts, fervently hoping they will attain success." They will at least be happy, for their faith as chemical vagrants is that so well expressed by Meredith's words:

"Every failure is a step advanced
To him who will consider how it chanced."

—*The Chemical Age* (London)

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JAMES A. COSS, Professor of Chemistry, Morningside College, Sioux City, Iowa.

HERBERT KRANICH, President Kranich Soap Co., Inc., 54 Richards Street, Brooklyn, N. Y.

LOUIS SILVERMAN, Chemist, U. S. Navy Department, Carnegie Building, Munhall, Pa.

JAMES TOY, Great Neck Towers, Great Neck, N. Y.

MAX TRUMPER, Consulting Clinical Chemist & Toxicologist, 920–921 Medical Arts Building, Philadelphia, Pa.

Associate

MORRIS GREENBERGER, Associate Chemist, U. S. Navy, 29th St. & 3rd Ave., Brooklyn, N. Y.

Junior

JULIUS C. KAPASH, Laboratory Helper, Naval Supply Depot, 29th St. & 3rd Ave., Brooklyn, N. Y.

To keep your year-book up to date, paste these new names in it each month.

NOTES FOR YOUR YEAR-BOOK

Please note in your year-book the following changes in addresses of our members.

DR. C. S. VAN VLEET (*p.* 38), University of Washington, Seattle, Washington.

KENNETH C. STEELE (*p.* 37), 1514 Sixth Avenue, Beaver Falls, Pa.

S. D. SHINKLE (*p.* 36), 317 Lafayette Ave., Passaic, N. J.

DR. M. C. WHITAKER (*p.* 39), 535 Fifth Avenue, New York, N. Y.

PERSONAL

The American Cyanamid Company announce that Dr. Milton C. Whitaker has been added to the executive staff of that organization. His headquarters will, in future, be located at the general offices of the Company, 535 Fifth Avenue, New York City.

Dr. Whitaker has been made President of a new subsidiary of the American Cyanamid Company, which is to be known as the Catalytic Process Corporation.

This company will consolidate the various Contact Sulphuric Acid interests of the parent company and its subsidiaries and direct the development and installation of plants and processes heretofore owned by the Selden Chemical Company, the Calco Chemical Company, the Chemical Construction Corporation, and the Cyanamid Company.

The other officers of the new company are: Walter S. Landis, Vice-President; W. P. Sturtevant, Secretary; and R. C. Gaugler, Treasurer.

Objectives of the American Institute of Chemists

To give chemists professional solidarity.

To put the profession back of a definite code of ethics.

To insist on adequate training and experience qualifications.

To educate the public to an understanding of what a chemist is.

To protect the public and the profession by fighting quackery.

To raise the economic status of chemists.

.....

HOWARD S. NEIMAN, *Secretary*
The American Institute of Chemists
233 Broadway
New York, N. Y.

Please send me an application blank for membership in the American Institute of Chemists.

Name.....

Position.....

Address.....

City..... State.....